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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,845	08/21/2003	Hiromi Matsusaka	P24079	6151

7055 7590 12/11/2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

CORRIELUS, JEAN B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/644,845	MATSUSAKA, HIROMI	
	Examiner	Art Unit	
	Jean B. Corrielus	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/24/03 and 6/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the drawing, see for instance fig. 3, uses "modulation scheme" in combination with the receiver circuitry. However, it is noted that receivers normally use "demodulation scheme" and transmitter on the other and uses "modulation scheme". It is suggested that "modulation scheme" recited in combination with the physical component of the receiver be replaced by "demodulation scheme".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification (including the abstract) recites a "modulation scheme" in combination with the receiver circuitry. However, it is noted that receivers normally uses "demodulation scheme" and transmitter on the other and uses ""modulation scheme". It is suggested that "modulation scheme" recited in combination with the physical component of the receiver be replaced by "demodulation scheme". In addition page 14, the sentence starting in line 25 and ending in line 26 is incomplete. Appropriate correction is required.

Claim Objections

3. Claims 1-6 are objected to because of the following informalities: claim 1 (see lines 2-10) recites "modulation scheme" in combination with the receiver circuitry. However, it is noted that receivers normally uses "demodulation scheme" and transmitter on the other and uses ""modulation scheme". It is suggested that "modulation scheme" recited in combination with the physical component of the receiver be replaced by "demodulation scheme". The same comment applies to claims 2-6, reciting similar limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida Makoto EP 0944200 A2.

As per claim 1, Yoshida teaches, see for instance fig. 3, a method and apparatus, for a wireless transmission system based on an adaptive modulation scheme which adaptively selects a plurality of modulation schemes according to variations in a propagation path characteristic, comprising:

a priority order adding step of adding priority order to modulation schemes to be candidates for estimation processing of said modulation scheme (note that as shown in fig. 3, the modulation schemes are arranged (prioritized) from low level i.e. QPSK to high level i.e. 256QAM for estimation processing) and an estimating step of executing estimation processing on modulation schemes one by one in descending order of said priority (note that the modulation scheme is estimated in each estimating unit, one by one) and selection circuit 215 confirming a modulation scheme of said received signal when predetermined likelihood is obtained by circuit 210 and confirming a modulation scheme of said received signal when predetermined likelihood is obtained.

As per claim 2, note that the priority order is inherently based on the channel of the received signal since the modulation schemes are arranged from worse channel condition QPSK to good 256 QAM. See fig. 3.

As per claim 3, in another embodiment, Yoshida Makoto teaches that the order is based on previously estimated reception scheme see fig. 9, 802-803.

As per claim 4, Yoshida Makoto teaches generating a threshold to be compared with said predetermined likelihood based on reception quality of the received signal

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wherein the predetermined likelihood is compared with said threshold see page 10, paragraph 0131.

As per claim 5, see claim 1.


As per claim 6, see claim 1: In addition Yoshita Makoto teaches a wireless transmission system comprising: a transmission apparatus that adaptively selects a modulation scheme corresponding to a transmission signal from a plurality of modulation schemes according to variations in a propagation path characteristic see figs. 1A and 1B.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on M-TH from 10:00 AM until 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jean B Corrielus
Primary Examiner
Art Unit 2611

12-07-06